

IN THE CLAIMS:

Please cancel claims 1-25 and enter new claims 26-33 as follows:

Claims **1-25** (cancelled).

26. (new) A process which comprises polymerizing an olefin in the presence of a catalyst system comprising an activator and an organometallic complex-containing mixture, wherein the organometallic complex-containing mixture is made by a method which comprises:

- (a) deprotonating a compound selected from the group consisting of indoles, carbazoles, 8-quinolinols, 2-pyridinols, and mixtures thereof, with an alkyllithium compound to produce an anionic ligand precursor; and
- (b) reacting the anionic ligand precursor with about 0.5 equivalents of a Group 4 transition metal tetrahalide at a temperature greater than about 10°C in the presence of a hydrocarbon solvent to produce the organometallic complex-containing mixture.

27. (new) The process of claim **26** wherein the catalyst system includes methyl alumoxane as an activator, and the methyl alumoxane is used at a [Al:M] molar ratio less than about 500.

28. (new) The process of claim **26** wherein the catalyst system is stored for up to about 90 days prior to use in the process.

29. (new) The process of claim **26** wherein the organometallic complex-containing mixture from step (b) is concentrated without removing insoluble products.

30. (new) A process which comprises polymerizing an olefin in the presence of a catalyst system comprising an activator and an organometallic complex-containing mixture, wherein the organometallic complex-containing mixture is made by a method which comprises:

- (a) deprotonating a compound selected from the group consisting of indoles, carbazoles, 8-quinolinols, 2-pyridinols, and mixtures thereof, with an alkyllithium compound to produce an anionic ligand precursor; and

- (b) reacting the anionic ligand precursor with about 1 equivalent of an indenyl Group 4 transition metal trihalide at a temperature greater than about 10°C in the presence of a hydrocarbon solvent to produce the organometallic complex-containing mixture.

31. (new) The process of claim **30** wherein the catalyst system includes methyl alumoxane as an activator, and the methyl alumoxane is used at a [Al:M] molar ratio less than about 500.

32. (new) The process of claim **30** wherein the catalyst system is stored for up to about 90 days prior to use in the process.

33. (new) The process of claim **30** wherein the organometallic complex-containing mixture from step (b) is concentrated without removing insoluble products.